

IN THE CLAIMS:

- 1        1. (currently amended) An electrically conductive composition which
- 2        comprises:
- 3            a plurality of cross-linked polymeric complexes; each polymeric complex
- 4        comprising:
- 5            a strand of a  $\pi$ -conjugated polymer; and
- 6            a strand of a polyelectrolyte, the polyelectrolyte being non-covalently bonded to
- 7        the  $\pi$ -conjugated polymer and having at least one reactive functional group, the reactive
- 8        functional group facilitating the cross-linkage between the polymeric complexes when
- 9        the complexes are heated, the composition resisting swelling when exposed to an aqueous
- 10       medium.